

REMARKS

Claims 5 and 9 has been amended. Proper support for the amendments to claims 5 and 9 can be found in the specification at least at paragraph [0033] and FIG. 5. Claims 1-11 are pending and under consideration. Claims 1, 5 and 9 are the independent claims. No new matter is presented in this Amendment.

DOUBLE PATENTING

Claims 1-11 provisionally rejected on the ground of nonstatutory double patenting over claims 1-10 and 34-43 of copending Application No. 10/124,366.

Since claims 1-11 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. § 102 are resolved.

Claims 1-11 provisionally rejected on the ground of nonstatutory double patenting over claims 1-10 and 34-43 of copending Application No. 10/828,289.

Since claims 1-11 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer or arguments as to the non-obvious nature of the claim would be premature. MPEP 804(I)(B).

As such, it is respectfully requested that the applicant be allowed to address any provisional obviousness-type double patenting issues remaining once the rejections of the claim under 35 U.S.C. § 102 are resolved.

REJECTIONS UNDER 35 U.S.C. §102:

Claims 1-11 are rejected under 35 U.S.C. §102(e) as being anticipated by Noda (U.S. Patent 6,175,686 B1 hereafter Noda).

Regarding the rejection of independent claim 1, it is noted that independent claim 1 recites an apparatus to record data on an optical information recording medium comprising, amongst other novel features, an interleaver which extracts and arranges the identifiers from ones of the ECC blocks to generate a recording block such that adjacent identifiers are of different ECC blocks. Applicants respectfully assert that Noda fails to disclose each of these features, notwithstanding the statements of the Examiner to the contrary.

In detail, the Office Action states that in FIG. 12, adjacent identifiers are of different standard format ECC blocks, hence any Channel Synthesis unit for implementing block S211 in FIG. 14 of Noda is an interleaver which extracts and arranges the identifiers from ones of the ECC blocks to generate a recording block such that adjacent identifiers are of different ECC blocks. However, a review of FIG. 14, and the reference indicate that an error correction block 23 of the extended format is constituted by 32 successive logical sectors 11, the number of which is twice that of the error correction block 13 of the standard format. Then, outer code parities 14A and 14B and inner code parities 15A and 15B serving as check parities for error correction are generated for the respective error correction sub-blocks 23A and 23B. In this manner, the error correction block 13 of the standard format shown in FIG. 5 has exactly the same structure as that of the error correction sub-blocks 23A or 23B which constitutes the error correction block 23 of the extended format shown in FIG. 14 (column 12, lines 39-54). In other words, FIG. 14 shows two error correction sub-blocks 23A and 23B, each error correction sub-block having inner code parities 15A, 15B and outer code parities 14A, 14B, respectively and each error sub-block having 16 sectors. Accordingly, as noted in FIG. 14, the sectors 11 of the different sub-blocks 23A and 23B are not adjacent to each other for they are separated by an inner code parity 15A. The only sectors adjacent to each other are Sector 0, Sector 2, Sector 4, etc., in sub-block 23A, however these are sectors belonging to the same sub-block. Similarly, Sector 1, Sector 3, Sector 5, etc., in sub-block 23B are adjacent to each other but also belong to the same sub-block. Therefore, assuming that each sector were to have an identifier, then the identifier of Sector 0 belonging to first sub-block 23A, would not be adjacent to the identifier of Sector 1 belonging to the second sub-block 23B, since the identifiers of Sectors 0 and 1 are separated by the inner code parity 15A.

Accordingly, Applicants respectfully assert that the rejection of independent claim 1 under 35 U.S.C. §102(e) should be withdrawn because Noda fails to teach or suggest each feature of independent claim 1.

Furthermore, Applicants respectfully assert that dependent claims 2-4 are allowable at least because of their dependence from claim 1, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 2-4 also distinguish over the prior art.

Regarding the rejection of independent claim 5, it is noted that claim 5 recites an apparatus to record data on an optical information recording medium comprising, amongst other novel features, an interleaver which arranges an identifier included in the first sector of the first ECC block as a first identifier, arranges an identifier included in the first sector of the second ECC block as a second identifier, adjacent to the first identifier, arranges an identifier included in the second sector of the first ECC block as a third identifier, adjacent to the second identifier, arranges an identifier included in the second sector of the second ECC block as a fourth identifier, adjacent to the third identifier, arranging identifiers included in the remaining sectors of the first and second ECC blocks with the same algorithm. Applicants respectfully assert that Noda fails to disclose each of the features recited in amended independent claim 5 for at least the following reasons.

Noda is relied for a teaching of an interleaver which arranges an identifier included in the first sector of the first ECC block as a first identifier, arranges an identifier included in the first sector of the second ECC block as a second identifier, arranges an identifier included in the second sector of the first ECC block as a third identifier, arranges an identifier included in the second sector of the second ECC block as a fourth identifier, and arranging identifiers included in the remaining sectors of the first and second ECC blocks with the same algorithm. In particular the Office Action relies on FIG. 14 of Noda for such a teaching.

However, as noted above, FIG. 14 of Noda teaches two sub-blocks 23A and 23B separated by an inner code parity 15A. In other words, the two sub-blocks 23A and 23B are not adjacent to each other. Therefore, assuming that each sector were to have an identifier, then the identifiers of two different sub-blocks would not be adjacent to each other, for example, the identifier of Sector No. 0 would not be adjacent to the identifier in Sector No. 1, since they are separated by the inner code parity 15A.

Accordingly, Applicants respectfully assert that the rejection of independent claim 5 under 35 U.S.C. §102(e) should be withdrawn because Noda fails to teach or suggest each feature of independent claim 5, as amended.

Furthermore, Applicants respectfully assert that dependent claims 6-8 are allowable at least because of their dependence from claim 5, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 6-8 also distinguish over the prior art.

Regarding the rejection of independent claim 9, it is noted that independent claim 9, as amended, recites an optical information reproducing apparatus comprising, amongst other novel features, a reading unit to read data from a recording block of an optical information recording medium, **wherein adjacent identifiers from different error correction code (ECC) blocks are alternately arranged in the recording block**, each of the ECC blocks comprising a plurality of sectors having corresponding identifiers. Applicants respectfully assert that Noda fails to disclose each of the features recited in amended independent claim 9 for at least the following reasons.

Noda is relied for a teaching that each channel A and B are error correction encoded to form two ECC blocks, sub-blocks 23A and 23B, one for each channel, each ECC block comprised of 16 recording sectors and labeled with identifiers 0-16.

However, as noted above, Noda teaches two sub-blocks 23A and 23B separated by an inner code parity 15A. In other words, the two sub-blocks 23A and 23B are not adjacent to each other. Therefore, assuming that each sector were to have an identifier, the identifiers of the two different sub-blocks would not be adjacent to each other, for example, the identifier of Sector No. 0 (sub-block 23A) would not be adjacent to the identifier in Sector No. 1 (sub-block 23B), since they are separated by the inner code parity 15A.

Accordingly, Applicants respectfully assert that the rejection of independent claim 9 under 35 U.S.C. §102(e) should be withdrawn because Noda fails to teach or suggest each feature of independent claim 9, as amended.

Furthermore, Applicants respectfully assert that dependent claims 10 and 11 are allowable at least because of their dependence from claim 9, and because they include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 10 and 11 also distinguish over the prior art.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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